APPENDIX 4 to PLAINTIFFS' FINAL INVALIDITY CONTENTIONS

Boland, U.S. Patent No. 5,584,136 (filed Jan. 18, 1995, issued Dec. 17, 1996)

Language from Patent-In-Suit	Disclosure in Reference
A grip extender in combination with a handgun, comprising:	Col. 1, ll. 12-17: "The present invention relates to an adapter for attachment to a lower portion of a magazine for a firearm. In particular, the present invention relates to a magazine base skirt for attachment to a magazine wherein the magazine is longer than the magazine well in the firearm stock or grip into which the magazine is inserted."
	Col. 4, 1. 63 – Col. 5, 1. 7: "Referring now to the drawings wherein like reference numerals refer to like and corresponding parts throughout, a firearm skirt/magazine assembly 10 of the present invention comprises a generally u-shaped member or magazine base skirt 12 which can be used in association with a firearm magazine 14. The magazine 14 is preferably a single-cartridge column, extended length magazine used in conjunction with an automatic or semiautomatic pistol. More preferably, the magazine 14 is adapted for insertion into the magazine or grip well of a 0.45 ACP government model pistol. Most preferably, the magazine 14 is a ten round, single column magazine."

a handgun using a variety of different model magazines,	Col. 1, ll. 36-37, 44-45: " there is a need for an extended magazine having increased round capacity that may be safely inserted into a standard autoloading firearm The subject invention herein solves all of these problems"
a grip extender with symmetrical interior side walls,	FIG. 3 34 4 2 56 56 18 68 76 66 52 18 76 66 52 74 64 56 75 76 76 77 76 76 76 77 77 76 76
an exterior front wall configured to a user's grip,	Col. 2, Il. 48-52: "Another object of the present invention is to have a firearm skirt/magazine assembly for autoloading firearms which is not only functional but also affords a smooth, continuous and uninterrupted lower extension for the entire stock profile of the firearm."
	Col. 4, ll. 45-56: "The base skirt is designed to fit over that portion of an extended length magazine which extends outside the grip well. Thus, upon attachment of the base skirt, the width of the extended portion of the magazine has an apparent width (i.e. magazine width plus base skirt width) which is the same or substantially the same as the width of the pistol grip. Thus, insertion of an extended length magazine bearing the base skirt, provides in effect an "extended grip" pistol, due to the smooth
	feel and appearance, whereby there is no longer any abrupt discontinuity between the end of the grip and the portion of the extended round magazine which extends outside of the grip well." Col. 7, ll. 23-28: "Additionally, although not shown, it may be envisioned that the u-shaped member having outer first and

	second side walls 68 and 70 respectively, of the skirt 12, defines either a plurality of grooved surfaces or a roughened surface for enhancing manual gripping of the firearm by a user during shooting."
and a rear wall, for use with the handgun magazine to fill a gap between the magazine and the handgun,	Col. 2, Il. 48-52 and Col. 4, Il. 45-56. Col. 7, Il. 29-32: "Another embodiment of the present invention is shown by FIGS. 12 to 14. A thin shim 78 can be interposed between hooks 50 and 52. The shim 78 serves to more firmly wedge the skirt 12 against the magazine 14." FIG. 12 FIG. 13 FIG. 13 FIG. 14 FIG. 14 FIG. 15 FIG. 15 FIG. 15 FIG. 16 FIG. 14
with said magazine having an open top for loading ammunition cartridges	Col. 3, ll. 18-19: " in Fig. 1, there is shown in phantom a cartridge loaded into the top of the magazine"

	Col. 5, ll. 16-17: "The open end 32 is at the top of the magazine 14."
and a closed bottom for containing said ammunition cartridges, said closed bottom ending in a floor plate, of determinable thickness, with a lower surface and an upper surface, with said floor plate also having a peripheral surface larger than a peripheral surface of a corresponding body of the magazine,	Col. 5, Il. 17-18: "The magazine 14 also has a closed bottom end 34." FIG. 4
said grip extender further comprising:	
a) a one-piece collar slideably mounted from the open top of said magazine and subsequently seated at the closed bottom of said magazine thereby substantially filling any gap resulting from a length of the magazine protruding from a handgun when said magazine is engaged into said handgun,	The patent is not limited in scope to simply a base-skirt in a horseshoe shape, but could also include a one-piece collar. <i>See</i> Col. 4, ll. 21-24: "An embodiment of the present invention can comprise a firearm magazine base skirt. The base skirt is a generally horseshoe or u-shaped item adapted to fit over a lower portion of a firearm magazine." <i>See also</i> Col. 4, ll. 45-56, <i>supra</i> .
said collar having a size and shape sufficient to elastically receive and grip the magazine and magazine floor plate thereby securely retaining the collar	The reference discloses that the preferred material of composition for the base skirt is plastic. <i>See</i> Col. 4, ll. 29-31. Col. 5, ll. 8-12: "As shown in FIG. 5, the u-shaped member 12 defines a curved end 18 and an open end 16 shaped to

correspond to the cross-sectional shape of the magazine 14, such that the u-shaped member 12 can fit snugly and securely around the magazine 14, as shown in FIG. 1."
A person of ordinary skill in the art would have understood that one embodiment of the reference's invention would have involved including opposed tangs oriented inward from the
pair of opposed ribs, said terior side walls of the collar. The concept of such inward projections is disclosed as by, for example, the "wedge-shaped hooks 50 and 52" (Col. 5, l. 54) and their "inwardly beveled surfaces 54 and 56 (Col. 5, ll. 57-58).
To the extent that a unitary projection located along the interior surface of the front of the collar could constitute "one pair of opposed ribs," such "ribs" are disclosed at Col. 5, Il. 33-47: "The u-shaped member 12 defines a groove 44 located along a convex bottom edge 46 of the closed end 18 of the u-shaped member 12 having a shape and position so as to be capable of receiving an extended tab portion or flange 48 located at the closed end 34 of the magazine 14. The groove 44 and the extended tab portion 48 align the skirt 12 with the magazine 14 in a forwardly supported interfitting relation for insertion into a stock or grip 49 of a firearm. The extended tab portion 48 when in engagement with the groove 44 provides an additional degree of alignment and further maintains the skirt 12 and magazine 14 in an assembled relationship. The interaction of the extended tab portion 48 of the magazine 14 and the groove 44 on the bottom of the skirt 12 provides a means by which the magazine 14 firmly abuts against the skirt 12."
nto its final position on tangs engages the lower perpendicular relationship to one another, see discussion supra
in engagement with the groove 44 provides an addition of alignment and further maintains the skirt 12 and main an assembled relationship. The interaction of the exportion 48 of the magazine 14 and the groove 44 on the of the skirt 12 provides a means by which the magazine firmly abuts against the skirt 12." To the extent that the ribs and the tangs could exist in

upper surface of floor plate against said the bottom shoulders of the opposed ribs.	

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4. The grip extender claim 1 further comprising a lower surface depending below the magazine floor plate thereby protecting said magazine from impacts with surfaces when the magazine is released from a handgun during reloading.	See discussion of Claim 1, <i>supra</i> . Additionally, a person of ordinary skill in the art would have known that a lower surface depending below the magazine floor plate could be included. This is so particularly because the reference describes the invention as a "high impact resistant polymer base skirt 12 [that] surrounds that portion of the extended length magazine which extends outside the grip well and provides a smooth transition from the magazine to the pistol frame, thereby improving gun handling and reducing the possibility of catching the extended length magazine on clothing or other objects." Col. 7, ll. 52-57.

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